

TRANSPARENT OPTICAL FILM COMPRISING DAMAGE PREVENTION LAYER HAVING PARTICLES DISTRIBUTED THEREIN

Abstract of the Disclosure

Disclosed herein is a transparent optical film, including an optically structured layer, which is a sheet formed of a transparent polymeric material and composed of a first surface having three-dimensional structures thereon and a second surface opposite the first surface, and a damage prevention layer formed on the second surface of the optically structured layer and composed of a transparent polymeric material and spherical organic or inorganic particles. The damage prevention layer has protruding surface portions formed by the particles protruding from the transparent polymeric material. The optical film of the current invention is advantageous because the prism structure and the opposite surface of the optical film are prevented from damage due to external impact, vibration and friction, and the attachment of impurities due to frictional static charges is prevented. Further, the front luminance and optical properties of the optical film are improved.